Tangible Result Driver – Don Hillis, Director of System Management

MoDOT works closely with other safety advocates to make our roads and work zones safer. The department supports educational programs which encourage safe driving practices and enforcement efforts which increase adherence to traffic laws. MoDOT will not compromise safety because it believes in the well-being of its employees and customers.





Number of fatalities and injuries year to date

Result Driver: Don Hillis, Director of System Management **Measurement Driver:** Leanna Depue, Highway Safety Director

Purpose of the Measure:

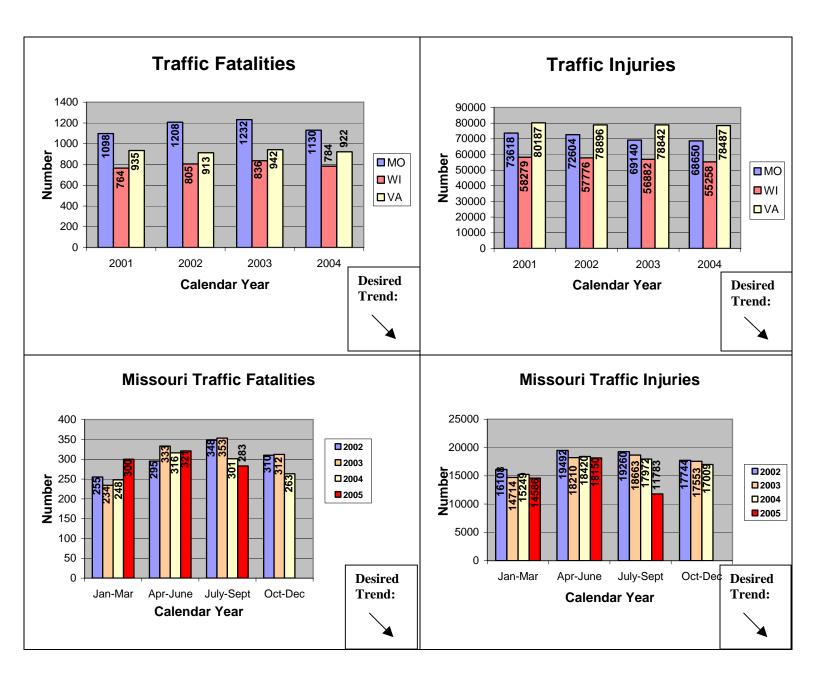
This measure tracks annual trends in fatalities and injuries resulting from Missouri motor vehicle crashes. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on all Missouri roads.

Measurement and Data Collection:

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, quarterly crash data is not in final form. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri. Each state's data is derived from their traffic crash fact sheets.

Improvement Status:

Fatalities decreased by 8 percent from 2003 to 2004 after a significant increase over the past three years. Injuries continued a downward trend. Fatalities in the first two quarters of calendar year 2005 were higher than the three previous years due to non-use of safety belts, speeding, alcohol- and drug-impaired driving, and a higher number of pedestrian fatalities. Although multiple fatalities are occurring more frequently in 2005, holiday weekend crash fatalities are significantly lower. Injuries were lower in the first two quarters of 2005 than in the previous three years, partially due to increased safety belt use. Safety advocates, organizations and agencies across Missouri have joined together to create *Missouri's Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and serious injuries on our roadways with a goal of 1,000 or fewer fatalities by 2008.



Number of impaired driver-related fatalities and injuries year to date

Result Driver: Don Hillis, Director of System Management **Measurement Driver:** Leanna Depue, Highway Safety Director

Purpose of the Measure:

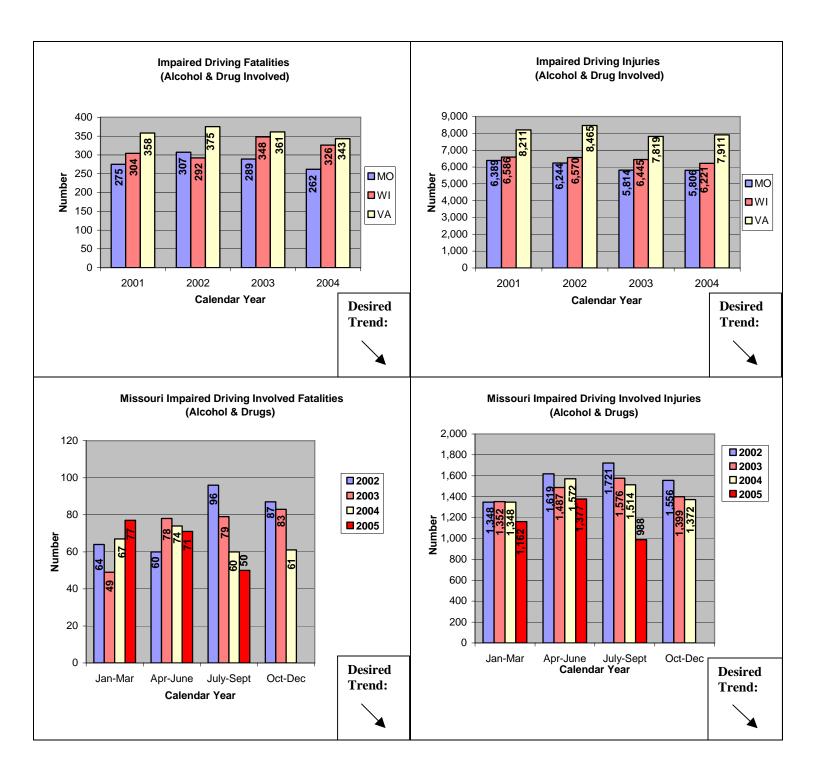
This measure tracks annual trends in fatalities and injuries resulting from motor vehicle crashes involving drivers who are impaired by alcohol and/or drugs. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint* for Safer Roadways, toward efforts that reduce fatalities and injuries on Missouri's roadways.

Measurement and Data Collection:

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, quarterly crash data is not in final form. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri. Each state's data is derived from their traffic crash fact sheets.

Improvement Status:

Alcohol- and drug-related fatalities and injuries show downward trends for the past two years, due to sustained law enforcement in targeted high crash corridors. Fatalities in the first two quarters of calendar year 2005 were higher than the three previous years, due to an increase in head-on and rural area crashes along with non-use of safety belts. Injuries were slightly lower in the first two quarters of 2005 than in the previous three years. In addition to Missouri participating in the annual "You Drink and Drive, You Lose." campaign, Missouri joined 14 other states with high alcohol-related crashes as a Strategic Evaluation State. Missouri agreed to increase law enforcement activity through June 2006 in areas that represent 65 percent of the states' high alcohol-related crashes. Safety advocates, organizations and agencies across Missouri have joined together to create *Missouri's Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and serious injuries on our roadways with a goal of 1,000 or fewer fatalities by 2008.



Rate of annual fatalities and injuries

Result Driver: Don Hillis, Director of System Management **Measurement Driver:** Leanna Depue, Highway Safety Director

Purpose of the Measure:

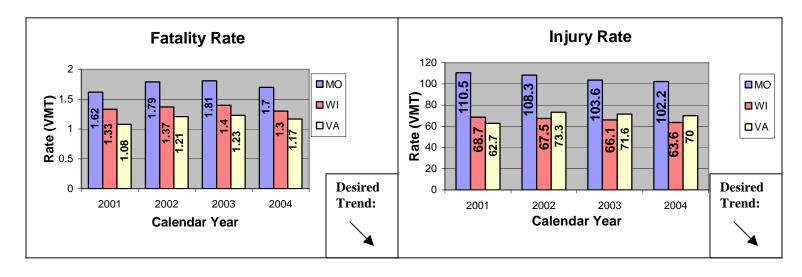
This measure tracks annual fatality and injury rates per one hundred million vehicle miles traveled (VMT) in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on Missouri's roadways.

Measurement and Data Collection:

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Rates cannot be calculated until the VMT is calculated in July of the following calendar year. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

Improvement Status:

The fatality rate decreased to 1.7 in 2004 after reaching 1.81 in 2003. The decrease is significant considering there were more vehicles registered and more miles traveled than in any previous year. Targeted law enforcement efforts, engineering safety projects and increased public awareness all contribute to the decrease.



Percent of safety belt/passenger vehicle restraint use

Result Driver: Don Hillis, Director of System Management **Measurement Driver:** Leanna Depue, Highway Safety Director

Purpose of the Measure:

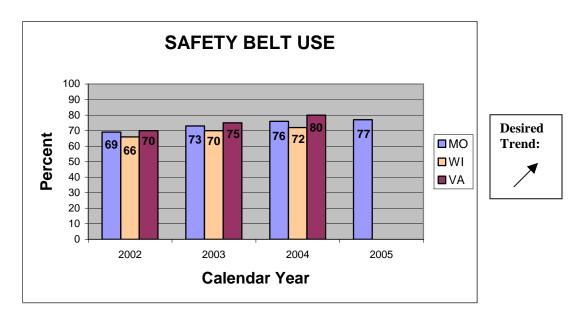
This measure tracks annual trends in safety belt usage by persons in passenger vehicles. This measure will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce the number of fatalities and injuries on all Missouri roads.

Measurement and Data Collection:

An annual statewide survey is conducted each June at 480 pre-selected locations in 20 counties. The data collected at these sites is calculated into a rate by use of a formula approved by the National Highway Traffic Safety Administration. The safety belt usage survey enables data collection from locations representative of 85 percent of the state's population. The data collection plan is the same each year for consistency and compliance with national transportation guidelines. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

Improvement Status:

Safety belt use has increased 8 percent in the past four years, due to increased public awareness and law enforcement participation in the National "Click it or Ticket" campaign. A pilot program focused on teen usage also proved to be successful in increasing use among teenagers.



Number of bicycle and pedestrian fatalities and injuries

Result Driver: Don Hillis, Director of System Management **Measurement Driver:** Leanna Depue, Highway Safety Director

Purpose of the Measure:

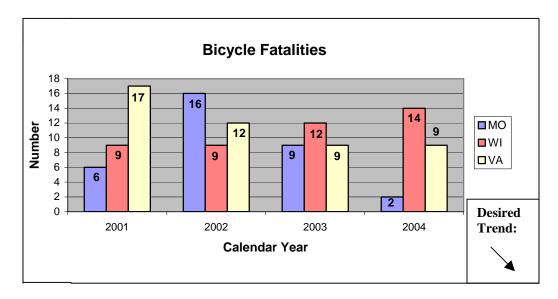
This measure tracks annual trends in fatalities and injuries resulting from motor vehicle crashes with bicycles and pedestrians in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on all Missouri roads.

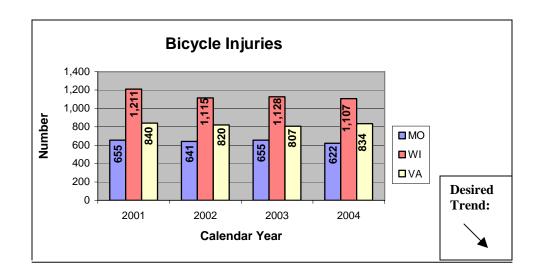
Measurement and Data Collection:

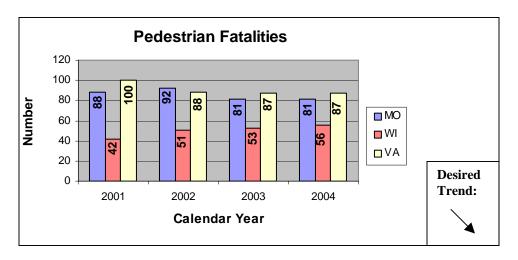
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Final crash data for each year is not available until approximately June of the following year. This data reflects the number of fatalities and injuries occurring when a motor vehicle is involved in a crash with a bicycle or pedestrian. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

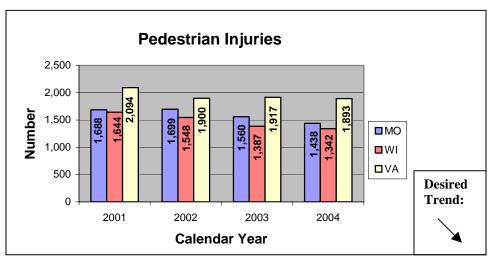
Improvement Status:

There has been a downward trend in bicycle fatalities and injuries over the past three years, due to more dedicated bicycle lanes and riding areas. Pedestrian fatalities and injuries also are on a downward trend, due to improved cross walks and signaling. Funds have been dedicated to the St. Louis and Kansas City regions in support of pedestrian safety under the *Blueprint for Safer Roadways* initiative.









Number of motorcycle fatalities and injuries

Result Driver: Don Hillis, Director of System Management **Measurement Driver:** Leanna Depue, Highway Safety Director

Purpose of the Measure:

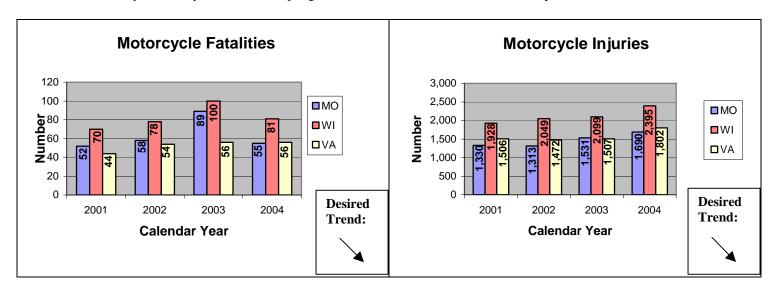
This measure tracks annual trends in fatalities and injuries resulting from motorcycle crashes in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on Missouri's roadways. The rates are calculated per hundred million vehicle miles traveled. HMVT cannot be established for motorcyclists alone.

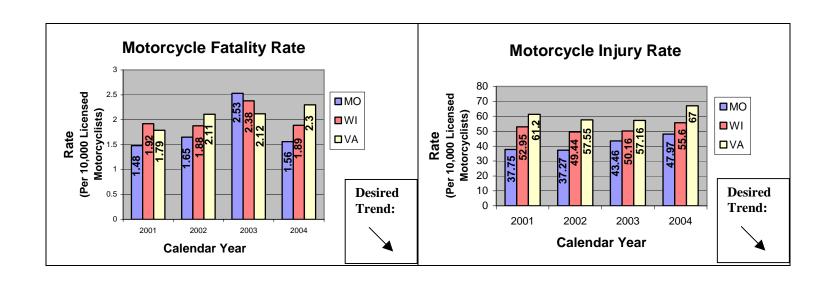
Measurement and Data Collection:

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

Improvement Status:

Fatalities have shown an upward trend over the period from 2001 to 2003, due to a significant increase in the number of licensed motorcyclists. Fatality totals returned to the established trend in 2004 after a significant spike in 2003. The spike is attributed to the significant increase in licensed inexperienced riders. Missouri continues to see an increase in the number of registered motorcycles and riders. Rider education classes are offered throughout Missouri so that no one must drive more than one hour to a site. Injuries also continue an upward trend, due to an increased number of riders. Missouri's trends are consistent with our comparison states that also have an increased number of riders. More than 4,000 riders at 28 sites are trained each year. Twenty-four new instructors are also trained each year. This year we are attempting to transition at least one mobile site into a permanent site.





Number of commercial motor vehicle crashes resulting in fatalities

Result Driver: Don Hillis, Director of Systems Management

Measurement Driver: Charles Gohring, Motor Carrier Services Program Manager

Purpose of the Measure:

This measure tracks the annual number of commercial motor vehicles involved in fatality accidents. The measure assists MoDOT in targeting educational and enforcement opportunities in an effort to decrease commercial vehicle related fatalities.

Measurement and Data Collection:

Crash statistics are derived from each of the states accident databases. The data reflects the number of commercial motor vehicles involved in crashes where one or more persons dies within 30 days of the crash. The fatality does not have to occur at the scene of the crash. It includes any person involved in the crash, including pedestrians and bicyclists, as well as occupants of the passenger cars, trucks, and buses. Missouri is compared to the states of Virginia and Wisconsin, as they are demographically similar to Missouri.

Improvement Status:

During the period from 2000 to 2004, the numbers of Missouri CMV fatal crashes have decreased. The five-year trend indicates the number of fatal CMV crashes have slowly dropped from 164 in 2000 to 153 in 2004, due to coordinated CMV safety efforts by MoDOT, Missouri State Highway Patrol, Kansas City and St. Louis Police Departments, and Federal Motor Carrier Safety Administration Missouri Division. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales. MoDOT also conducts education, training, compliance reviews, safety audits, and truck inspections all designed to reduce accidents. Education is offered to the public and motor carriers through the Highway Watch, Share the Road, and seatbelt usage programs. Outreach training sessions designed to assist motor carriers attain compliance with the safety and hazardous materials regulations are also offered. Truck inspections at motor carrier destinations and terminals to ensure drivers and vehicles are in a safe operating condition. Compliance Reviews are conducted on motor carriers with poor safety performances involving drivers, vehicles, and accidents. Safety Audits are conducted on new motor carriers in an effort to ensure they begin operations in a safe manner. The Missouri State Highway Patrol, St. Louis and Kansas City Police Departments also conduct commercial vehicle roadside inspections to remove unsafe drivers and vehicles from the road.



Number of commercial motor vehicle crashes resulting in injuries

Result Driver: Don Hillis, Director of Systems Management

Measurement Driver: Charles Gohring, Motor Carrier Services Program Manager

Purpose of the Measure:

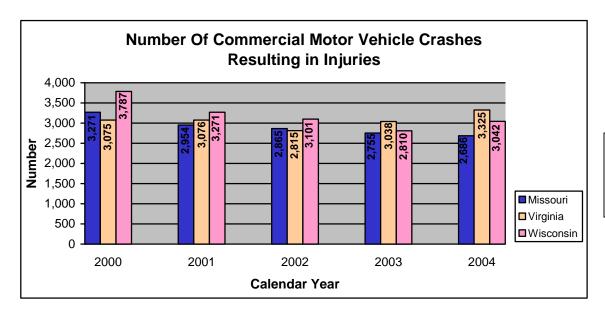
This measure tracks annual number of commercial motor vehicles involved in injury accidents. The measure assists MoDOT in targeting educational and enforcement opportunities in an effort to decrease commercial vehicle related injuries.

Measurement and Data Collection:

Crash statistics are derived from each of the states accident databases. The data reflects the number of commercial motor vehicles involved in crashes where one or more persons are injured in the crash. It includes any person involved in the crash, including pedestrians and bicyclists, as well as occupants of the passenger cars, trucks, and buses. Missouri is compared to the states of Virginia and Wisconsin, as they are demographically similar to Missouri.

Improvement Status:

During a five-year period from 2000 to 2004, the number of CMV crashes resulting in injuries has continuously decreased. The improvement is due to coordinated CMV safety efforts by MoDOT, Missouri State Highway Patrol, Kansas City and St. Louis Police Departments, and the Federal Motor Carrier Safety Administration Missouri Division. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales. MoDOT also conducts education, training, compliance reviews, safety audits, and truck inspections all designed to reduce accidents. Education is offered to the public and motor carriers through the Highway Watch, Share the Road, and seatbelt usage programs. Outreach training sessions designed to assist motor carriers attain compliance with the safety and hazardous materials regulations are also offered. Truck inspections are conducted at motor carrier destinations and terminals to ensure drivers and vehicles are in a safe operating conditions. Compliance Reviews are conducted on motor carriers with a poor safety performance linking drivers, vehicles, and accidents. Safety Audits are conducted on new motor carriers in an effort to ensure they begin operations in a safe manner. The Missouri State Highway Patrol, St. Louis and Kansas City Police Departments also conduct commercial vehicle roadside inspections to remove unsafe drivers and vehicles from the road.



Number of fatalities and injuries in work zones

Result Driver: Don Hillis, Director of System Management

Measurement Driver: Scott Stotlemeyer, Technical Support Engineer

Purpose of the Measure:

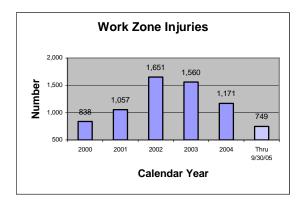
An important factor in evaluating the safety of Missouri's transportation system is determining the safety of work zones located on the state's public roads. This measure tracks the number of injuries and fatalities occurring as a result of a traffic crash in a work zone on any of these facilities.

Measurement and Data Collection:

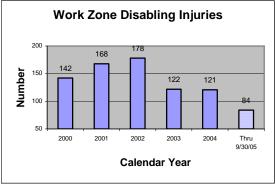
Law enforcement agencies in Missouri are required to report vehicular crashes via submittal of a standardized vehicle accident report form to the Missouri State Highway Patrol. MSHP personnel enter these reports into a statewide crash database. MoDOT staff queries this data to identify injuries and fatalities associated with work zones.

Improvement Status:

Since 2002, the year Missouri traffic safety representatives reformatted the accident report form and MSHP conducted extensive training to emphasize work zones, the number of work zone-related crashes, disabling injuries, injuries, and fatalities on the state's roadways has generally decreased over consecutive years. This reduction, despite increasing traffic demand on the transportation system and a growing state highway construction program, results from the department's proactive approach to raising work zone awareness and minimizing impacts on the traveling public over the same timeframe.











Number of highway-rail crossing fatalities and collisions

Results Driver: Don Hillis, Director of System Management **Measurement Driver:** Rod Massman, Administrator of Railroads

Purpose of the Measure:

This measure tracks annual trends in fatalities and collisions resulting from train-vehicle crashes at railroad crossings in Missouri. It will help drive the Highway Safety plan, which supports the Blueprint for Roadway Safety, toward efforts that reduce the number of fatalities, collisions and injuries at Missouri's highway-rail crossings.

Measurement and Data Collection:

Crash data is collected at the Multimodal Operations Division, Railroad Section and is entered into a railroad safety information system (RSIS). The record system is used to update MoDOT's traffic management system. This figure does not include fatalities from those trespassing on railroad property at areas other than at railroad crossings, which are tabulated separately. Missouri is compared to the states of Virginia and Wisconsin, as their populations and amount of rail traffic are similar to Missouri, and Virginia has a very low fatality/collision rate for its population.

Improvement Status:

The Railroad Section continues to coordinate its railroad crossing projects in the areas of greatest need, using a safety exposure index, in addition to focusing on crossings with a history of accidents or very limited sight distance. In addition, the use of railroad corridors allows limited funds to be used over a wider area and allows for financial participation by the railroads, thereby increasing the number of overall projects completed in specific areas of the state. Other improvements include an increased emphasis on, and MoDOT employee participation in, public outreach presentations on rail safety in conjunction with Operation Lifesaver, Inc., and further exploration of public-private partnerships to install gates and lights at crossings or install grade separations at former crossings where public funds alone would not be enough to complete the project.

